DAIRIKI et al. - Application No. 10/523,106 This paper filed September 10, 2008

tristyrylphenyl ether phosphate salt" as an ingredient. The two compounds are represented by the following formulae:

Ph Ph Ph
$$CH-Me$$
 $O = CH_2CH_2 = O = SO_3$ X+

 $O = CH_2CH_2$ X+

 $O =$

The applicants enclose herewith a copy of Chemical Abstract database output as a technical reference, which shows the chemical formula of polyoxyethylene tristyrylphenyl ether sulfate sodium salt.

In contrast, Suzuki et al. discloses "tristyryl phenyl ether added thereon with ethylene oxide" in Example 1, which would be understood by a person of ordinary skill in the art to be a compound represented as follows:

Ph Ph CH-Me
$$O+CH_2CH_2-O+CH_2CH_2$$

2

Upon comparison, it should be clear to the Examiner that the compound referred to in Suzuki et al. is a significantly different compound from those recited in present claim 1. In particular, the two compounds recited in claim 1 have sulfonate group (-S0₃⁻) or phosphonate group (-P0₃²-), which is electrically charged and strongly hydrophilic, while the Suzuki et al. compound does not have such a group.

Accordingly, the applicants strongly assert that the reference to "tristyryl phenyl ether added thereon with ethylene oxide" in Suzuki et al. can not suggest to nor motivate a person skilled in the art to use, or serve as a reasonable basis for trying the two compounds recited in present claim 1.

In response to the comments in the Advisory Action regarding the reference of Suwa et al. (JP 05-043402 A), this reference discloses "polyoxyethylene styrylphenyl ether sulfate" in the reference claim 1, Examples 1, 2, 5 and 6 and other places. Significantly, however, the reference does not specifically refer to "polyoxyethylene tristyrylphenyl ether sulfate salt" of the presently claimed invention.

Accordingly, the applicants have shown that neither Suzuki et al. nor Suwa et al. disclose or suggest "polyoxyethylene tristyrylphenyl ether sulfate salt" or "polyoxyethylene tristyrylphenyl ether phosphate salt". Consequently, it is quite clear that the two references could not provide any teaching or suggestion to motivate a person skilled in the art to combine a lignosulfonate surfactant with "polyoxyethylene tristyrylphenyl ether sulfate salt" or "polyoxyethylene tristyrylphenyl ether phosphate salt", as recited in present claim 1.

In addition, neither Suzuki et al. nor Suwa et al. refers to a degree of sulfonation of a lignosulfonate surfactant, which is defined as "at least 2.0" in claim

DAIRIKI et al. - Application No. 10/523,106 This paper filed September 10, 2008

1. As shown in the Rule 132 Declaration filed in the subject application on June 27,

2008, the use of a certain type of lignosulfonate surfactant provides a significant

benefit for the presently claimed invention. The cited reference of Deming et al.

(US 5,354,742), does not remedy the above described deficiencies of Suzuki et al.

and Suwa et al. and a person of ordinary skill in the art could not expect the

significant benefits of the presently claimed invention based on the disclosure of the

presently cited prior art.

The applicants submit that the Amendment filed April 29, 2008, the

Preliminary Submission with Rule 132 Declaration filed June 27, 2008, and the

presently filed Second Preliminary Submission provide compelling evidence and

arguments demonstrating the allowability of the presently claimed invention under

35 USC 103(a) in view of the prior art.

Accordingly, it is believed that this application is in condition for allowance

and a Notice to that effect is respectfully requested.

Respectfully submitted,

MANELLI DENISON & SELTER, PLLC

Paul E. White, Jr.

Reg. No. 32,011

Tel. No.: (202) 261-1050 Fax No.: (202) 887-0336

2000 M Street, N.W. Seventh Floor

Washington, D.C. 20036-3307

(202) 261-1000

4

TECHNICAL REFERENCE

Chemical Abstract Database Output Showing The Chemical Formula Of Polyoxyethylene Tristyrylphenyl Ether Sulfate Sodium Salt



STN Tokyo

```
Welcome to STN International * * * *
Item
         Date
                  Headline
NEWS
                  STN/CAS FILES Workshop Schedule - Japan (August 2008 - October 2008)
      1
         JUN 08
         APR 04
                  STN AnaVist, Version 1, to be discontinued
NEWS
                  WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS
      3
         APR 15
NEWS
         APR 28
                  EMBASE Controlled Term thesaurus enhanced
                  IMSRESEARCH reloaded with enhancements
NEWS
      5
         APR 28
         MAY 30
NEWS
                  INPAFAMDB now available on STN for patent family
      6
                  searching
                  DGENE, PCTGEN, and USGENE enhanced with new homology
NEWS
         MAY 30
                  sequence search option
NEWS
      8
         JUN 06
                  EPFULL enhanced with 260,000 English abstracts
                  KOREAPAT updated with 41,000 documents
NEWS
      9
         JUN 06
                  USPATFULL and USPAT2 updated with 11-character
NEWS 10
         JUN 13
                  patent numbers for U.S. applications
NEWS 11
         JUN 19
                  CAS REGISTRY includes selected substances from
                  web-based collections
NEWS 12
         JUN 25
                  CA/CAplus and USPAT databases updated with IPC
                  reclassification data
NEWS 13
         JUN 30
                 AEROSPACE enhanced with more than 1 million U.S.
                  patent records
         JUN 30
NEWS 14
                  EMBASE, EMBAL, and LEMBASE updated with additional
                  options to display authors and affiliated
                  organizations
NEWS 15
         JUN 30
                 STN on the Web enhanced with new STN AnaVist Assistant
                  and BLAST plug-in
NEWS 16
         JUN 30
                  STN AnaVist enhanced with database content from EPFULL
                 CA/CAplus patent coverage enhanced
NEWS 17
         JUL 28
NEWS 18
         JUL 28
                 EPFULL enhanced with additional legal status
                  information from the epoline Register
         JUL 28
                 IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS 19
NEWS 20
         JUL 28
                 STN Viewer performance improved
NEWS 21
         AUG 01
                 INPADOCDB and INPAFAMDB coverage enhanced
NEWS 22
         AUG 13
                 CA/CAplus enhanced with printed Chemical Abstracts
                 page images from 1967-1998
                 CAOLD to be discontinued on December 31, 2008
NEWS 23
         AUG 15
NEWS 24
         AUG 15
                 CAplus currency for Korean patents enhanced
                  CA/CAplus, CASREACT, and IFI and USPAT databases
NEWS 25
         AUG 25
                 enhanced for more flexible patent number searching
NEWS 26
         AUG 27
                 CAS definition of basic patents expanded to ensure
                 comprehensive access to substance and sequence
                 information
```

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

```
NEWS HOURS
NEWS INTER
NEWS WWW
NEWS IPC8

STN operating Hours
INTERNET ACCESS to STN-T(STN-Tokyo)
STN Tokyo World Wide Web Site
For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 10:06:29 ON 01 SEP 2008

=> file reg COST IN JAPANESE YEN

SINCE FILE TOTAL ENTRY SESSION 28 28

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:06:42 ON 01 SEP 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 AUG 2008 HIGHEST RN 1044824-41-0 DICTIONARY FILE UPDATES: 29 AUG 2008 HIGHEST RN 1044824-41-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s 108914-57-4/rn L1 1 108914-57-4/RN

=> dis 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN 108914-57-4 REGISTRY Entered STN: 28 Jun 1987 RN ED Poly(oxy-1,2-ethanediyl), $\alpha\text{-sulfo-}\omega\text{-}\text{[2,4,6-tris(1-}$ phenylethyl)phenoxy]-, sodium salt (9CI) (CA INDEX NAME) OTHER NAMES: CNPolyethylene glycol mono(tristyrylphenyl)ether sodium sulfate 70559-26-1, 115892-97-2, 117469-13-3, 206132-92-5 (C2 H4 O)n C30 H30 O4 S . Na DR MF CIPMS PCT Polyether SR CA STN Files: LC CA, CAPLUS, CHEMLIST, USPATFULL CRN (106715-95-1)

Na

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> logoff y COST IN JAPANESE YEN

SINCE FILE ENTRY

TOTAL SESSION 708

FULL ESTIMATED COST

680

STN INTERNATIONAL LOGOFF AT 10:10:43 ON 01 SEP 2008